

REMARKS

Status of the Claims

Claims 1-8, 10-18 and 21-24 are now present in this application. Claims 1, 2 and 6 are independent.

Claims 1, 2 and 6 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-3, 5-8, 11, 12, 15, 16, 18 and 21-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Rooij et al., U.S. Patent No. 5,728,021 (hereafter "Van Rooij") in view of Anpo (JP 01-169149). Claims 4, 10, 13, 14, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Rooij in view of Anpo and further in view of Zimmer, U.S. Patent No. 4,718,880. These rejections are respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Without conceding to the propriety of the Examiner's rejection, but merely to timely advance the prosecution of the application, as the Examiner will note, independent claims 1, 2 and 6 have been amended to more clearly clarify the present invention, respectively.

In particular, independent claim 1, as amended, includes, inter alia, the recitation of "...a plurality of links each possessing through holes; a plurality of pins inserted through the through-holes for interconnecting the plurality of links, ... the plurality of pins include plural types of pins having different rigidities in the longitudinal direction thereof... **the plurality of links include plural types of links, at least one type of link possessing two through-holes of the same shape and at least one type of link possessing two through-holes of a different shape from each other respectively corresponding to said plural types of pins having different rigidities.**"

Support for this amendment can be found at least in, for example, Fig. 2 and the corresponding disclosure of the Specification as originally filed. Thus, no new matter has been added. Applicants respectfully submit that the above identified features set forth in claim 1 are not disclosed or suggested by the references relied on by the Examiner.

Specifically, as embodied in Fig. 2 of the present application, the through-holes 4f and 4h of the link 2 are configured to correspond to the respective shapes of the greater pin 3f and the thinner pin 3h, respectively. In particular, the greater through-hole 4f penetrated by the greater pin 3f is greater than the thinner through-hole 4h penetrated by the thinner pin 3h. On the other hand, the link 3 possesses the through-holes 4h of the same shape. In other words, the present invention, as set forth in claim 1, requires that the plurality of links include plural types of links, where at least one type of link possesses two through-holes of the same shape and at least one type of link possesses two through-holes of a different shape from each other respectively corresponding to the plural types of pins.

With regard to the Examiner's reliance on Van Rooij, the Examiner on page 4 of the Office Action notes that the through-holes of the link in Van Rooij are of different shapes. Therefore, it is clear that Van Rooij does **NOT** teach or suggest plural types of links, at least one type of link possessing through-holes of the same shape. Therefore, Applicants respectfully submit that Van Rooij fails to teach or suggest "*the plurality of links include plural types of links, at least one type of link possessing two through-holes of the same shape and at least one type of link possessing two through-holes of a different shape from each other respectively corresponding to said plural types of pins having different rigidities*" as recited in claim 1.

With regard to Anpo, as argued previously, referring to Fig. 1 and page 5 of the translation of Anpo provided by the Examiner, all of the joint pins 12a₂, 12b₂ and 12c₂ are used with only one type of the link plate 10b. In view of this, it is clear that each link plate of Anpo does **NOT** have two through-holes of different configurations respectively corresponding to the different configurations of the joint pins 12a₂, 12b₂ and 12c₂. Therefore, Applicants respectfully submit that Anpo also fails to teach or suggest "*the plurality of links include plural types of links, at least one type of link possessing two through-holes of the same shape and at least one type of link*

possessing two through-holes of a different shape from each other respectively corresponding to said plural types of pins having different rigidities” as recited in claim 1, and thus fails to cure the deficiency of Van Rooij.

With regard to Zimmer, this reference is relied on for its teaching of providing links with differing pitches, as asserted by the Examiner on page 5 of the Office Action. Setting aside the appropriateness of combining Zimmer with Van Rooij and Anpo, it is noted that Zimmer merely teaches using sets of links with different pitches, which has nothing to do with the shapes of the through-holes. In fact, after a careful review of the figures of Zimmer, it can be seen that the shapes of the through-holes in each link are the same. Therefore, Applicants respectfully submit that Zimmer also fails to teach or suggest *“the plurality of links include plural types of links, at least one type of link possessing two through-holes of the same shape and at least one type of link possessing two through-holes of a different shape from each other respectively corresponding to said plural types of pins having different rigidities”* as recited in claim 1, and thus fails to cure the deficiencies of Van Rooij and Anpo.

In view of the above, Applicants respectfully submit that even if, assuming *arguendo*, the references relied on by the Examiner were somehow combined as suggested by the Examiner, the combination still cannot achieve the present invention, since the alleged combination will NEVER have the above mentioned features as required in the present invention.

In addition, Applicants respectfully point out that one of the crucial features of Van Rooij is the shapes of the through-holes in the links as described in col. 4, lines 46-63. In particular, in Van Rooij, it is important that for the first hole of the link, the front part of the contour thereof must closely resemble or be just a little smaller than the contour of the pin and the rear part of the contour thereof must be almost identical to the envelope of the path of the interpiece; on the other hand, for the second hole of the link, **oppositely**, the front part of the contour thereof must be almost identical to the envelope of the path of the pin and the rear part of the contour thereof must closely resemble or be just a little smaller than the contour of the interpiece. Accordingly, **the first hole and the second hole of the link in Van Rooij must be of different shapes.**

In view of this, Applicants respectfully submit that, if the Examiner discovers new references allegedly teaching the above mentioned feature of the present invention as recited in claim 1, the assertion that it would be obvious for one skilled in the art to modify Van Rooij to include the above mentioned feature of the present invention will be unreasonable and inappropriate, because **the asserted combination cannot change the principle of operation of the primary reference or render a reference inoperable for its intended purpose.** (See, M.P.E.P. §§ 2143.01, sections entitled “The Proposed Modification Cannot Render the Prior Art Unsatisfactory For Its Intended Purpose” and “The Proposed Modification Cannot Change the Principle of Operation of a Reference,” and M.P.E.P. § 2145(III)).

In view of the above, since the references relied on by the Examiner, either taken alone or in combination, fail to teach each and every claimed feature as recited in claim 1, Applicants respectfully submit that claim 1 clearly defines over the teachings of the references relied on by the Examiner.

With regard to independent claims 2 and 6, claim 2, as amended, includes the recitation of “*wherein the plurality of links include plural types of links, at least one type of link possessing two through-holes of the same shape and at least one type of links possessing two through-holes of a different shape from each other respectively corresponding to said plural types of pins having different sectional shapes or sectional areas*” and claim 6, as amended, includes the recitation of “*wherein the plurality of links include plural types of links, at least one type of link possessing the first and second through-holes of the same shape and at least one type of link possessing the first and second through-holes of a different shape from each other respectively corresponding to the pins of two or more different widths*” Applicants respectfully submit that for the same reasons as claim 1, the references relied on by the Examiner, either taken alone or in combination, also fail to teach or suggest the above identified features as recited in claims 2 and 6, and thus claims 2 and 6 also clearly define over the references relied on by the Examiner.

In addition, claims 3-5, 7, 8, 10-18, and 21-24 depend, either directly or indirectly, from independent claims 1, 2 and 6, and are therefore allowable based on their respective dependence from independent claims 1, 2 and 6, which are believed to be allowable.

In view of the above amendments to the claims and remarks, Applicants respectfully submit that claims 1-8, 10-18, and 21-24 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are respectfully requested.

Conclusion

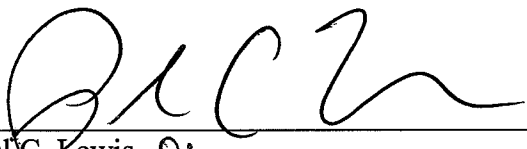

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Paul C. Lewis, Registration No. 43368 at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: **November 5, 2010**

Respectfully submitted,

By 
Paul C. Lewis 
Registration No.: 43368
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road, Suite 100 East
P.O. Box 747
Falls Church, VA 22040-0747
703-205-8000